

Notice of Allowability

Application No.

10/053,704

Examiner

Nguyen N Hanh

Applicant(s)

HATTORI ET AL.

Art Unit

2834

Am

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Request for consideration filed on 12/4/03.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☒ The drawings filed on 04 December 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Remarks

1. In view of Applicant's argument, the Examiner withdraws the rejection under 35 USC 103(a) to claim 10. Therefore, all the claims are in a condition for allowance.

Allowable Subject Matter

2. Claims 1-11 are allowed.

3. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 1,4 and 6: the prior art of record does not show a permanent magnet type reluctance electric motor wherein a novel relationship between a selected number of variables and how the relationship of the selected variables has a dependency on torque (claims 1, 4 and 6).

Regarding claim 10, the most relevant prior found are US patent No. 5,642,013 patented to Wavre and Sakai et al. (US 6,274,960). Sakai et al. disclose a reluctance type electric machine with embedded permanent magnet and Wavre discloses a permanent magnet motor wherein the reluctance force of the motor is in dependence on the ratio of slot width to tooth pitch and the optimum working range for the reluctance force. However, the present invention and Sakai et al. directed to different kind of electric machine (a reluctance type electric machine) and the optimum range disclosed by the present invention as recited in claim 10 aimed at increase reluctance force or the propelling force to rotate the motor (as can be seen clearly in Fig. 11 of the present invention) while the optimum range disclosed by Wavre aimed at reducing reluctance

force that disturbs the motor operation (as can be seen clearly in area 45 of Fig. 7 of Wavre; in Col. 2, lines 12-30 and Col. 4, lines 25-40). Therefore, it is not obvious to combine Wavre to Sakai et al. and the present invention as recited in claim 10 is distinguished over prior art.

Conclusion

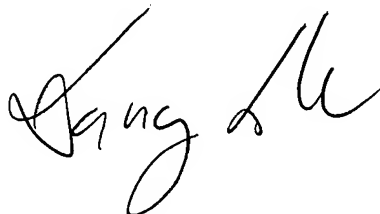
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (571) 272-2031. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberger, can be reached on (571) 272-2044. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HNN

May 27, 2004

A handwritten signature in black ink, appearing to read 'Dang Le', is written over the printed name.

**DANG LE
PRIMARY EXAMINER**